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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:	Amarasekera, et al.	Group Art Unit:	1713
Application No.:	09/000,824	Examiner:	C. Caixa Lu
Filed:	December 30, 1997	Att'y Dkt. No.:	41980.002004
Title:	SILICONE COMPOSITIONS FOR HIGH VOLTAGE INSULATOR APPLICATIONS		

**SECOND REQUEST FOR AN INTERFERENCE**  
**PURSUANT TO 37 C.F.R. § 1.607**

**Mail Stop Petition**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

Sir:

Applicants request an Interference Pursuant to 37 C.F.R. § 1.607 between the above-identified application and U.S. Patent No. 5,824,729, issued October 20, 1998, and U.S. Patent No. 6,090,879, issued July 18, 2000. The information required by 37 C.F.R. § 1.607(a) is set forth below under headings which correspond to the subsections of § 1.607 to facilitate consideration by the Examiner.

(1) **IDENTIFICATION OF THE PATENTS WHICH INCLUDE SUBJECT MATTER WHICH INTERFERES WITH THE APPLICATION**

The patents which include subject matter which interferes with subject matter claimed in the above-identified application ("the Amarasekera Application") are (1) U.S. Patent No. 5,824,729 ("the '729 Patent"), issued on October 20, 1998, to Takao Matsushita and Osamu Takuman for a "Silicone Rubber Composition" and (2) U.S. Patent No. 6,090,879 ("the '879 Patent"), issued July 18, 2000, to Osamu Takuman and Takao Matsushita for a "Silicone Rubber Composition for Application as Electrical Insulation." The '729 Patent issued from

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U.S. Patent Application Serial No. 790,782, filed January 30, 1997, and purports to be entitled to the benefit of Japanese Application No. 8-037457, filed January 30, 1996. The '879 Patent issued from U.S. Patent Application Serial No. 08/862,045, filed May 22, 1997, and purports to be entitled to the benefit of Japanese Application No. 8-152978, filed May 24, 1996. Dow Corning Toray Silicone Co., Ltd. is the assignee named on the face of both the '729 Patent and the '879 Patent.

(2) PRESENTATION OF PROPOSED COUNTS

Applicants respectfully submit proposed Count 1 which is attached hereto in Appendix A. Proposed Count 1 is identical to Claim 1 of the '729 Patent.

(3) IDENTIFICATION OF THE CLAIMS IN THE '729 PATENT AND THE '879 PATENT WHICH CORRESPOND TO THE PROPOSED COUNT

Claim 1 of the '729 Patent, which is the first of two independent claims in the '729 Patent, is identical to proposed Count 1 and therefore corresponds exactly to proposed Count 1. Claim 2 of the '729 Patent, which is the second of two independent claims in the '729 Patent, corresponds substantially to proposed Count 1. A side-by-side comparison is set forth as follows:

<u>Claim 2 of the '729 Patent</u>	<u>Count 1</u>
A silicone rubber composition comprising:	A silicone rubber composition comprising:
(A) 100 weight parts organopolysiloxane gum having at least 2 silicon-bonded alkenyl groups in each molecule and the average compositional formula: $R_aSiO_{(4-a)/2}$ in which R is selected from substituted and unsubstituted monovalent hydrocarbon	(A) 100 weight parts organopolysiloxane gum having at least 2 silicon-bonded alkenyl groups in each molecule and the average compositional formula $R_aSiO_{(4-a)/2}$ in which R is selected from substituted and unsubstituted monovalent hydrocarbon

groups and $\alpha$ has a value from 1.95 to 2.05,	groups and $\alpha$ has a value from 1.95 to 2.05,
(E) 10 to 300 weight parts aluminum hydroxide powder whose surface has been treated with a treating agent selected from the group consisting of silanes and siloxane oligomers having alkenyl and alkoxy or hydroxy substitution, and	(B) 10 to 300 weight parts aluminum hydroxide powder, (C) 0.1 to 30 weight parts of a treating agent selected from the group consisting of silanes and siloxane oligomers having alkenyl and alkoxy or hydroxy substitution, and
(D) 0.1 to 10 weight parts organoperoxide.	(D) 0.1 to 10 weight parts organoperoxide.

Element (A) of Claim 2 and Count 1 correspond exactly.

Element (E) of Claim 2 and elements (B) and (C) of Count 1 differ only in that element (E) of Claim 2 recites the aluminum hydroxide powder and the treating agent as a combined element whereas elements (B) and (C) of Count 1 separately recite aluminum hydroxide powder and treating agent, respectively. It will be appreciated, however, that element (E) of Claim 2 and element (B) of Count 1 both recite “10 to 300 weight parts aluminum hydroxide powder. And that element (E) of Claim 2 and element (C) of Count 1 both recite “a treating agent selected from the group consisting of silanes and siloxane oligomers having alkenyl and alkoxy or hydroxy substitution.” As such, it is believed that element (E) of Claim 2 and elements (B) and (C) of Count 1 correspond to one another.

Element (D) of Claim 2 and Count 1 correspond exactly.

The remaining claims of the '729 Patent—Claims 3-18—are all dependent claims which depend from independent Claims 1 and 2, either directly or indirectly. Claims 3-18 are believed to correspond substantially to proposed Count 1 as they do not define separate patentable inventions in view of Claims 1 and 2 and in view of Count 1.

Claim 1 of the '879 Patent, which is the only independent claim in the '879 Patent, corresponds substantially to proposed Count 1. A side-by-side comparison is set forth as follows:

<u>Claim 1 of the '879 Patent</u>	<u>Count 1</u>
A silicone rubber composition comprising:	A silicone rubber composition comprising:
<p>(A) 100 weight parts organopolysiloxane gum comprising at least 2 silicon-bonded alkenyl groups in each molecule and having average compositional formula:</p> $R_aSiO_{(4-a)/2}$ <p>in which R is selected from the group consisting of substituted monovalent hydrocarbon groups and unsubstituted monovalent hydrocarbon groups and <i>a</i> has a value from 1.95 to 2.05,</p>	<p>(A) 100 weight parts organopolysiloxane gum having at least 2 silicon-bonded alkenyl groups in each molecule and the average compositional formula</p> $R_aSiO_{(4-a)/2}$ <p>in which R is selected from substituted and unsubstituted monovalent hydrocarbon groups and <i>a</i> has a value from 1.95 to 2.05,</p>
<p>(B) 1 to 300 weight parts aluminum hydroxide powder surface treated with a treating agent selected from the group consisting of organomethoxysilanes, organoethoxysilanes, and organosilazanes, and</p>	<p>(B) 10 to 300 weight parts aluminum hydroxide powder,</p> <p>(C) 0.1 to 30 weight parts of a treating agent selected from the group consisting of silanes and siloxane oligomers having alkenyl and alkoxy or hydroxy substitution, and</p>
(D) an organoperoxide curing agent in a quantify sufficient to cure the composition.	(D) 0.1 to 10 weight parts organoperoxide.

Components (A) correspond exactly in substantive terms. Although the word “comprising” is used instead of “having,” these terms have the same legal meaning. Further, although the substituted and unsubstituted monovalent hydrocarbon groups are not worded exactly the same, the only difference is a second occurrence of the phrase “hydrocarbon groups.”

Element (B) of Claim 1 of the ‘879 Patent and elements (B) and (C) of Count 1 differ in that element (B) of Claim 1 recites the aluminum hydroxide powder and the treating agent as a combined element whereas elements (B) and (C) of Count 1 separately recite aluminum hydroxide powder and treating agent, respectively. It will be appreciated, that although, that element (B) of Claim 1 recites “1 to 300 with parts surface-treated aluminum hydroxide” and element (B) of Count 1 recites “10 to 300 weight parts aluminum hydroxide powder” these ranges largely overlap. Element (B) of Claim 1 and element (C) of Count 1 both recite a treating agent. The treating agent of Claim 1 includes one selected from the group consisting of “organomethoxysilanes, organoethoxysilanes, and silazanes” and element (C) of Count 1 includes a treating agent selected from “the group consisting of silanes and siloxane oligomers having alkenyl and alkoxy or hydroxy substitution.” Organomethoxysilanes and organoethoxysilanes are both silanes having alkoxy substitutions, and thus the constituents of each group largely overlap. As such, it is believed that element (B) of Claim 1 of the ‘879 Patent and elements (B) and (C) of Count 1 correspond to one another.

Element (D) of Claim 1 of the ‘879 Patent is an “organoperoxide curing agent in a quantity sufficient to cure the composition”. Element (D) of Count 1 is “0.1 to 10 weight parts organoperoxide.” Element (D) of Count 1 is identical to Claim 1 of the ‘729 patent in which the organoperoxide was for purposes of curing the composition. Thus the amount stated in element (D) of Count 1 must necessarily be sufficient to cure the composition, or Claim 1 was not properly enabled and could not have issued. As such, it is believed that elements (D) of the ‘879 Patent and Count 1 correspond to one another.

Claim 1 of the '879 Patent is the only independent claim in the '879 Patent. The remaining claims in the '879 Patent—Claims 2-15—are all dependent claims which depend from Claim 1, either directly or indirectly. Claims 2-15 are believed to substantially correspond to proposed Count 1 as they do not define separate patentable inventions in view of Claim 1 and in view of Count 1.

(4) CLAIMS OF THE AMARASEKERA APPLICATION WHICH CORRESPOND TO THE PROPOSED COUNTS

Claim 17 of the Amarasekera Application corresponds substantially to the proposed count. A side-by-side comparison is set forth as follows:

<u>Claim 17 of Amarasekera Application</u>	<u>Count 1</u>
A silicone rubber composition comprising:	A silicone rubber composition comprising:
(A) 100 weight parts organopolysiloxane gum having at least 2 silicon-bonded alkenyl groups in each molecule and the average compositional formula: $R_aSiO_{(4-a)/2}$ in which R is selected from substituted and unsubstituted monovalent hydrocarbon groups and <i>a</i> has a value from 1.95 to 2.05,	(A) 100 weight parts organopolysiloxane gum having at least 2 silicon-bonded alkenyl groups in each molecule and the average compositional formula $R_aSiO_{(4-a)/2}$ in which R is selected from substituted and unsubstituted monovalent hydrocarbon groups and <i>a</i> has a value from 1.95 to 2.05,
(B) 15 to 300 weight parts aluminum hydroxide powder,	(B) 10 to 300 weight parts aluminum hydroxide powder,
(C) 0.1 to 1 weight part of a silane coupling agent, and	(C) 0.1 to 30 weight parts of a treating agent selected from the group consisting of silanes and siloxane oligomers having alkenyl and alkoxy or hydroxy substitution, and

(D) 0.1 to 5 weight parts of a peroxide based curing agent.	(D) 0.1 to 10 weight parts organoperoxide.
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It will be appreciated that Claim 17 of the Amarasekera Application does not correspond exactly to proposed Count 1. Pursuant to 37 C.F.R. § 1.607(a)(4), Applicants will therefore provide the required explanation why Claim 17 corresponds to Proposed Count 1, looking at each of the elements (A)-(D).

Element (A) of Claim 17 and Count 1 correspond exactly.

Element (B) differs only in that Claim 17 recites “15 to 300 weight parts aluminum hydroxide powder” whereas Count 1 recites “10 to 300 weight parts aluminum hydroxide powder.” As the ranges are largely overlapping, including the common range of “15-300 weight parts,” it is believed that they legally correspond to one another.

Element (C) of Claim 17 and element (C) of proposed Count 1 are not literally identical. However, it will be appreciated that element (C) of Claim 17 recites one species of coupling agent (silane) whereas proposed Count 1 includes a silane treating agent as one species. Furthermore, although the ranges recited are not identical, they do overlap.

Element (D) differs only in that Claim 17 recites “0.1 to 5 weight parts of a peroxide” whereas Count 1 recites “0.1 to 10 weight parts organoperoxide.” As the ranges are largely overlapping, including the common range of “0.1 to 5 weight parts,” it is believed that they legally correspond to one another.

(5) APPLYING THE TERMS OF ANY APPLICATION CLAIM TO THE DISCLOSURE OF THE APPLICATION

Under 37 C.F.R. § 1.607(a)(5), Applicants are required to apply the terms of any application claim (i) identified as corresponding to the count; and (ii) not previously in the application to the disclosure of the application. In the present case, none of the claims

designated as corresponding to a count was “not previously in the application.” Accordingly, Applicants are not required to provide this showing.

(6) EXPLANATION OF HOW THE REQUIREMENTS OF 35 U.S.C. § 135(B) ARE MET

All of the claims now pending were present in the application within one year of the issuance of both the '729 and '879 patents. Accordingly, no explanation is required. However, Applicants note that Claim 17 had been amended to recite “wherein said silane treating agent (C) is present in an amount effective to act as a surface modifier for the aluminum hydroxide powder.” It will be appreciated that this further description of the silane treating agent was an inherent characteristic of Claim 17, as originally added to the application, and to Count 1. As such, the later addition of this claim language did not narrow or expand the scope of Claim 17, as originally added to the application. Nevertheless, Applicants have amended Claim 17 to return it to the language as originally added to the application.

**PRIMA FACIE SHOWING BY AMARASEKERA, ET AL.,  
PURSUANT TO 37 C.F.R. § 1.608**

The filing date of the Amarasekera Application, December 30, 1997, is more than three months after the effective filing date of both the '729 Patent and the '879 Patent. Applicants [file herewith] have previously filed and made of record with their first Request for an Interference a Declaration pursuant to 37 C.F.R. § 1.608 demonstrating that Applicants are *prima facie* entitled to a judgment relative to the patentee.

**CONCLUSION**

Applicants respectfully request that an interference be declared employing the proposed Count 1 set forth in attached Appendix A with Claims 1-18 of the '729 Patent; Claims 1-15 of the '879 Patent; and the claims of the Amarasekera Application designated *supra* as corresponding to the proposed counts. Such action is respectfully requested.



In the event that the Examiner has any questions concerning this Request By Applicant For Interference Pursuant to 37 C.F.R. § 1.607, or the above-identified application in general, the Examiner is invited to contact the undersigned attorneys concerning such questions so that prosecution of this application may be expedited.

Respectfully submitted,

Dated: \_\_\_\_\_

*November 4, 2003*

By: \_\_\_\_\_

*David H. Milligan*

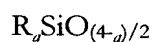
Shawn K. Leppo, Reg. No. 50,311  
David H. Milligan, Reg. No. 42,893  
Robert M. Schulman, Reg. No. 31,196

HUNTON & WILLIAMS  
1900 K Street, N.W.  
Suite 1200  
Washington, D.C. 20006-1109  
Telephone: (202) 955-1500  
Facsimile: (202) 778-2201

**APPENDIX A**

1. A silicone rubber composition comprising:

(A) 100 weight parts organopolysiloxane gum having at least 2 silicon-bonded alkenyl groups in each molecule and the average compositional formula



in which R is selected from substituted and unsubstituted monovalent hydrocarbon groups and  $a$  has a value from 1.95 to 2.05,

(B) 10 to 300 weight parts aluminum hydroxide powder,

(C) 0.1 to 30 weight parts of a treating agent selected from the group consisting of silanes and siloxane oligomers having alkenyl and alkoxy or hydroxy substitution, and

(D) 0.1 to 10 weight parts organoperoxide.